DOCUMENT RESUME

ED 069 329 PS 005 467

AUTHOR Acuff, Nancy Hamblen
TITLE Paternal Effectiveness in a Selected Cognitive Task.
PUB DATE 71
NOTE 23p.

EDRS PRICE MF-$0.65 HC-$3.29
DESCRIPTORS Analysis of Variance; *Cognitive Ability; *Effective Teaching; *Fathers; *Instructional Improvement; Mothers; *Parent Role; Sex Differences
IDENTIFIERS Draw A Man Test

ABSTRACT

The immediate effectiveness of paternal instruction in a selected cognitive task was investigated. The sub-problems were (1) to compare paternal and maternal instruction, and (2) to analyze paternal instructional effectiveness with the son or the daughter. The cognitive task selected was the Goodenough-Harris Draw-A-Man Test. Subjects were 42 children, aged 4 through 6, and were randomly assigned to treatment, paternal or maternal instruction. The findings from the analysis of the change factors of the test indicated that the father was an effective agent in affecting pre-posttest increment in contrast to the non-intervention controls. Hypotheses indicating that paternal influence was more effective than maternal influence were only partially supported. Hypotheses concerning cross-sex influence in producing positive and significant change were not found. The final hypothesis, that children instructed by a parent display more positive and significant pre-posttest increment than the control group, was clearly confirmed. A conclusion is that non-verbal learnings appear to be readily amenable to intervention. (LH)

U. S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

For Research Only
ETSU CHILD STUDY CENTER
COPYRIGHTED 1971

ED 069329

PATERNAL EFFECTIVENESS IN A SELECTED COGNITIVE TASK

PERMISSION TO REPRODUCE THIS COPYRIGHTED MATERIAL HAS BEEN GRANTED BY
Nancy Hamblen Acuff
TO ERIC AND ORGANIZATIONS OPERATING UNDER AGREEMENTS WITH THE U.S. OFFICE OF EDUCATION. FURTHER REPRODUCTION OUTSIDE THE ERIC SYSTEM REQUIRES PERMISSION OF THE COPYRIGHT OWNER.

By

Nancy Hamblen Acuff, Ph.D.

The Ohio State University, 1971

Professor Marlin L. Languis, Adviser

The purpose of the study was to investigate the immediate effectiveness of paternal instruction in a selected cognitive task. The sub-problems were (1) to compare paternal and maternal instruction; and (2) to analyze paternal instructional effectiveness with the son or the daughter. The cognitive task selected was the Goodenough-Harris Draw-A-Man Test.

The design was a classic 3 x 2 with 7 subjects in each cell; the subjects were 42 children, ages 4.0 through 6.0 selected from a university child study center in a small Appalachian city. The experimental subjects were randomly assigned to treatment, paternal or maternal instruction. All the subjects were pretested by male or female examiner with 7 girls assigned to male examiner-father instruction and 7 girls assigned to female examiner-mother instruction. The experimental boys were assigned to one group of 7 to male examiner-father instruction while another 7 boys were assigned to female examiner-mother instruction. The 7 boys and 7 girls in the control groups were pretested and posttested by random assignment to a male

PS 005467

FILMED FROM BEST AVAILABLE COPY

or female examiner. The sample was heterogeneous in socioeconomic background, ranging from affluence to culturally disadvantaged. The pretest and posttest consisted of the Draw Yourself segment of the Draw-A-Man Test. The experimental sequence was videotaped.

The data were analyzed by analysis of variance; the sources of interaction were determined by the Sheffe' procedure. Significance was determined at the .05 level of confidence.

The research hypotheses given were:

Hypothesis #1. The father is more effective than the mother in producing positive and significant pre-posttest increment with the daughter.

Hypothesis #2. The father is more effective than the mother in producing positive and significant pre-posttest increment with the son.

Hypothesis #3. The father is more effective in producing positive and significant pre-posttest increment with the daughter than with the son.

Hypothesis #4. The mother is more effective in producing positive and significant pre-posttest increment with the son than with the daughter.

Hypothesis #5. The children instructed by the parent display more positive and significant pre-posttest increment than the control group.

The findings from the analysis of variance of the change factors on the Goodenough Harris Draw-A-Man Test indicated that the father was an effective agent in effecting pre-posttest increment in contrast to the non-intervention controls. The analysis of variance

indicated significant effects with the B factor (Parental Influence) which was significant at the .001 level of confidence ($F = 7.89$; df 2/36). The Sheffe' multiple comparisons demonstrated that only the mean score increase of the fathers was significantly greater than the control mean. Neither the A factor (Sex of Progeny) nor the AB factor reached the level of confidence required.

The Sheffe' procedures utilizing a compound contrast tested the above hypotheses. The combined means representing parental influence was found to be significantly greater than the non-intervention (control) group at the .05 level of confidence.

The hypotheses were accepted or rejected according to the evidence from the findings. Hypotheses #1 and #2 indicating that paternal influence was more effective than maternal influence was only partially supported. Hypotheses #3 and #4 concerning cross-sex influence in producing positive and significant change were not found because significant interaction was not observed between A and B factors. Hypothesis #5 was clearly confirmed by the Sheffe' comparison.

The findings indicated several contributions to theory. There was evidence of a developmental shift which was consistent with psychoanalytic premises. Non-verbal learnings appeared to be readily amenable to intervention. The behavior evidenced during the experiment verified transaction which was not originally anticipated. Paternal instruction with the child emerged as a potent variable.

CHAPTER III

RESULTS

The focus of this investigation was to determine the immediate effectiveness of paternal instruction in a selected cognitive task. The paternal role was examined in an instructional act with the daughter and with the son. The experimental situation was structured to study and contrast either paternal or maternal instruction with the son or the daughter.

The following research hypotheses were tested:

Hypothesis #1. The father is more effective than the mother in producing positive and significant pre-posttest increment with the daughter.

Hypothesis #2. The father is more effective than the mother in producing positive and significant pre-posttest increment with the son.

Hypothesis #3. The father is more effective in producing positive and significant pre-posttest increment with the daughter than with the son.

Hypothesis #4. The mother is more effective in producing positive and significant pre-posttest increment with the son than with the daughter.

Hypothesis #5. The children instructed by a parent display more positive and significant pre-posttest increment than the control group.

Findings

The data resulting from the pretest and posttest scores represented a wide range of scores on the PPVT and the Goodenough-Harris Draw-A-Man Test. A bar graph illustrates the 42 pretest and 42 posttest scores and the mean of the PPVT-IQ test administered one month earlier.

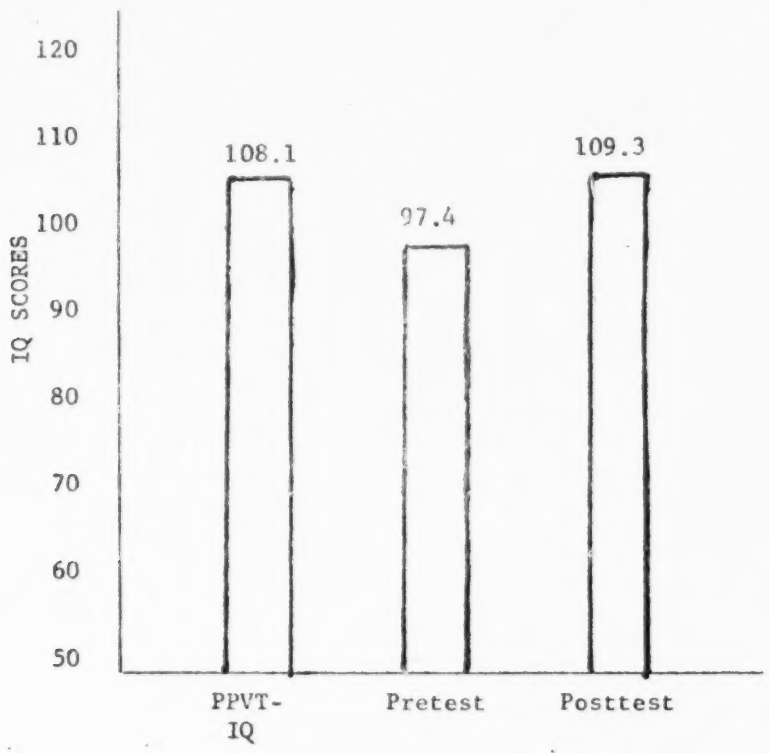

Fig. 2 Overall Means of PPVT-IQ, Goodenough-Harris Pretest and Posttest

The respective treatment combinations, means, ranges, standard deviations, and variance observed for PPVT, Draw-A-Man Pretest and Draw-

PS 005467

A-Man Posttest are presented in Table 1. Examination of Table 1 reveals a wide range of IQ, and pretest and posttest scores.

Table I

Means, Ranges, and Variance for the Goodenough-Harris Pre-Posttest Scores for Treatment Combinations

Variables		Daughters	Sons
Fathers:	$\bar{X}$	92.14	87.42
	R	95	44
Pretest	σ^2	1033.55	309.6
	$\bar{X}$	118.0	113.14
	R	38	75
Posttest	σ^2	1054.67	818.16
Mothers:	$\bar{X}$	97.71	98.14
	R	39	46
Pretest	σ^2	214.8	221.5
	$\bar{X}$	102.57	121.57
	R	48	65
Posttest	σ^2	278.29	818.16
Control:	$\bar{X}$	111.14	98.0
	R	77	35
Pretest	σ^2	575.0	446.9
	$\bar{X}$	109.42	91.14
	R	41	45
Posttest	σ^2	174.53	202.69
Subtotal:	$\bar{X}$	100.33	94.52
	R	106	57
Pretest	σ^2	536.60	275.96
	$\bar{X}$	110.00	108.62
	R	98	82
Posttest	σ^2	541.34	639.95

Grand Totals		
Pretest	$\bar{X}$	97.4
	R	51
	σ^2	442.82
Posttest	$\bar{X}$	109.3
	R	99
	σ^2	605.54

As indicated in Chapter II, the principal dependent variable was pre-posttest difference on the Goodenough-Harris task. Table II represents change score means and assorted standard deviations for the 2 x 3 design arrangement.

Table II

Change Score Means and Standard Deviations for Significant Treatment Combinations

		Parental Status			
		B_1 Fathers	B_2 Mothers	B_3 Controls	Totals
Progeny	A_1 Daughters	$\bar{X}_{11} = 25.86$ $SD_{11} = 19.15$	$\bar{X}_{12} = .43$ SD = 14.94	$\bar{X}_{13} = -1.71$ SD = 26.03	$\bar{X}_{.1.} = 8.19$ SD = 23.34
	A_2 Sons	$\bar{X}_{21} = 25.71$ SD = 21.75	$\bar{X}_{22} = 23.43$ SD = 21.17	$\bar{X}_{23} = -6.86$ SD = 14.89	$\bar{X}_{.2.} = 14.10$ SD = 23.97
	Totals	$\bar{X}_{..1} = 25.79$ SD = 19.69	$\bar{X}_{..2} = 11.93$ SD = 20.49	$\bar{X}_{..3} = -4.29$ SD = 20.55	$\bar{X}... = 11.14$ SD = 23.56

An ANOVAR was performed on the data. The findings are summarized in Table III.

Table III

Analysis of Variance of Change Scores by Parental Status and Sex of Progeny

Source	d.f.	Sum of Squares	Mean Squares	F
Sex of Progeny (A)	1	366.09	366.09	.91
Parental Status (B)	2	6,343.00	3,117.00	7.89***
A x B	2	1,578.05	789.02	1.96
Error	36	14,466.00	401.83	
Total	41	22,753.14		

*$p < 0.05$
**$p < 0.01$
***$p < 0.001$

Relative to parental influence, the analysis of data in Table III showed that parental status was significant at the 0.001 level of confidence.

The results of the analysis revealed only one significant effect. Specifically, the parental status main effect was observed to be significant ($F = 7.89$; df 2/36; $p < .001$). Sheffe' multiple comparisons were conducted among the three pair wise parental status group means. A difference of 19.41 was needed to demonstrate significance at the 0.05 level of confidence. Thus, only the mean of the fathers (25.79) was demonstrated to be significantly greater than the control mean (-4.29).

Neither the A factor (Sex of Progeny) nor the AB factor reached the level of confidence required. The B factor (Parental Status)

exceeded the 0.05 level of confidence required.

To test the hypotheses previously stated, a compound contrast, again utilizing Sheffe' procedures, was conducted between the combined mean of parents [(25.79 + 11.93) /2 = 18.86] and the overall control group mean (-4.29). The difference needed for significance was found to be 16.80 at the required 0.05 level of confidence. Since 18.86 - (-4.29) > 16.80, the combined mean representing parental influence was found to be significantly greater at the .05 level than the combined mean of the non-intervention (control) group.

Hypotheses--Accepted or Rejected

The hypotheses tested in this study were:

Hypothesis #1. The father is more effective than the mother in producing positive and significant pre-posttest increment with the daughter.

This hypothesis was not supported by the findings. The B factor effects were significant at the 0.001 level of confidence. The father's overall influence was strong in relation to non-intervention, but the analysis was not powerful enough to show that the father's influence was greater than the mother's with the daughter.

Hypothesis #2. The father is more effective than the mother in producing positive and significant pre-posttest increment with the son.

This hypothesis was only partially supported. The father's interaction with the son was meaningful, but the difference with the son was not significantly greater than the results obtained by the mother. The hypothesis was rejected.

Hypothesis #3. The father is more effective in producing positive and significant pre-posttest increment with the daughter than with the son.

The hypothesis must be rejected because of a failure to observe a significant interaction between the A and B factors.

Hypothesis #4. The mother is more effective in producing positive and significant pre-posttest increment with the son than with the daughter.

There was no significant interaction effect obtained between the A and B factors; therefore, the hypothesis was rejected.

Hypothesis #5. The children instructed by a parent display more positive and significant pre-posttest increment than the control group.

The findings from the analysis of variance of change factors supported the hypothesis that the children instructed by the parents displayed more and significant change than the control group. This finding was clearly confirmed by the post hoc Sheffe' comparison. The differences were found to be significant at the 0.05 level of confidence. This analysis indicated that the paternal interaction was the factor which reached the required level of significance.

Additional Measures

After paternal instruction, one male child (age 4.0) showed a loss in score points. The experimenter questioned the assumption of sexual imprinting in the sample being studied. The Kohlberg sex imprinting survey was administered to all the subjects. (See Appendix.)

The test was administered by a male and a female student aide. The results indicated that all children were imprinted in sexual identity except three. The youngest male child in the group felt he could change his sexuality if he wished. Two of the older girls (5.5) with over 130 I. Q.'s felt they could be boys if they chose to be; one of the girls resented being a girl. The boy was in the experimental group; both girls were in the control group. Thus, the assumption of sexual imprinting by age four was found in this sample.

An interesting relationship was suspected between the age of the child and the pretest scores and the posttest scores. The means were plotted for five-month intervals; the resulting configuration seemed to indicate a trend. Upon attempting to restructure the data into another research design, it was readily apparent that there were too few subjects in the designated cells and a zero count with respect to girls at the 5.0-5.6 year age level in the experimental group. It was concluded that with this sample it was not fruitful to pursue the question of the age factor; perhaps in another experiment this factor could be taken into account in a more meaningful way.

Non-significant but interesting findings were suggested by a plot of the cell means presented in Figure 3.

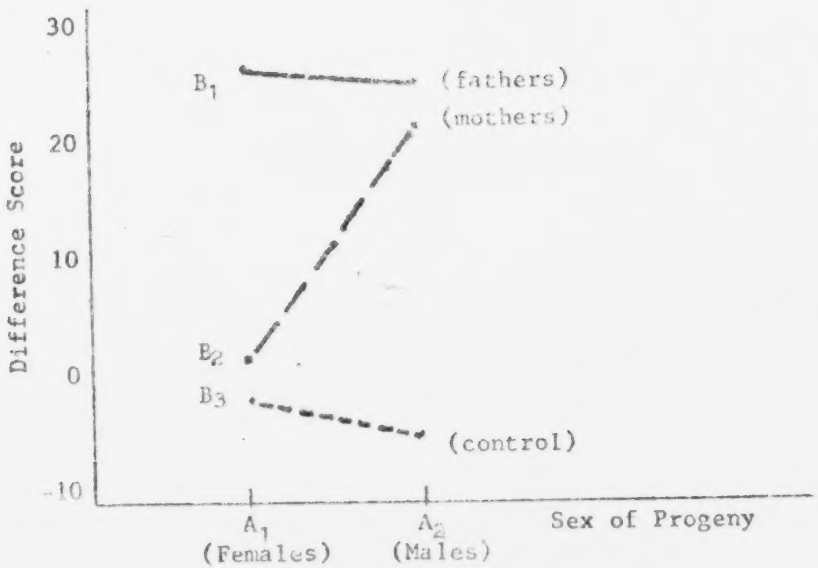

Fig. 3 Linear Comparison of Cell Means of Change Scores

Certain trends were indicated graphically. The father's performance with both sons and daughters was consistent and significant in contrast to the controls as indicated by the previous ANOVAR. (The cell means for the change scores were presented in Table II.)

The father's ability to effect change for daughters was a mean score increment of 25.86. With the sons, the increment was 25.71. With both sexes the father was quite successful in effecting positive change in the cognitive task. The father's intervention appeared to be consistent with the child in the age group studied.

The mother's ability to effect change appeared less consistent. The change produced with the daughters was low, with a mean change of less than one point (.42). The mother's mean change for sons was 23.43 which was approximately the same as the father's mean score with the sons.

Thus, fathers' intervention brought about positive pre-posttest increment with daughters and sons while the mothers' intervention was markedly successful with the sons but not with the daughters.

The control girls' mean change score (-1.71) and the control boys' change score (-6.86) represented a decrease.

Though none of these trends reached significance, they are such that it could be reasonably assumed that with a larger sample valuable findings would be made.

Summary

The purpose of this study was an attempt to determine what effect paternal intervention would be in a selected cognitive task. The prime hypothesis was that the father would be more instrumental in effecting change than the mother with both the daughter and the son.

An analysis of variance of the mean change scores indicated significant effects with the B factor (Parental Influence) at the 0.001 level of confidence which exceeded the 0.05 level of confidence required. Neither the A (Progeny) factor nor the AB factor reached the level of confidence required.

Although the graphic trends were non-significant, they presented interesting findings. From this graphical representation, a consistent trend of paternal influence was noted. The mothers' effectiveness was more erratic. A negligible change was produced by the daughters and a mean score comparable to paternal influence was produced by the sons.

The hypotheses were accepted or rejected according to the evidence from the findings. Hypothesis #1 and Hypothesis #2, indicating

that paternal influence was more effective than maternal influence were only partially supported. The fathers' performance with sons and daughters effected positive change. The mothers' effectiveness with sons was also positive but in interaction with the daughters the results were negligible. Hypotheses #3 and #4 concerning cross-sex influence in producing positive and significant change were not supported because significant interaction was not observed between the A and B factors. Hypothesis #5 was clearly confirmed by the Sheffé comparison. Children instructed by the parent displayed more positive and significant pre-posttest increment than the control group. The source of this effect was observed to be paternal influence.

The descriptive statistics of the developmental trends yielded another interesting finding. The pretest showed a marked variation in developmental differences in boys and girls. The posttest administered after the parental instruction produced identical patterns in the boys and the girls. The girls' raw scores, when plotted graphically, were generally lower than the boys'; the low scores were generated by mother instructed daughters and the control girls.

The experiment confirmed the potency of paternal intervention. Maternal intervention with the son was not significant and with the daughter produced either no effect or regression. The negative response of daughters to mothers, the regression of the control groups, and the marked developmental shifts after treatment yielded the most unexpected results. The implications from these findings are compelling and could be significant in educational programs for young children.

CHAPTER IV

SUMMARY AND IMPLICATIONS

The purpose of the study was to investigate the immediate effectiveness of paternal instruction in a selected cognitive task. The sub-problems within the framework of the investigation were (1) to compare paternal instruction with maternal instruction; and (2) to analyze the instructional effectiveness of the father with the son or the daughter.

The problem to be analyzed was the immediate effectiveness of paternal instruction in a given cognitive task. The task selected was the Draw Yourself segment of the Goodenough-Harris Draw-A-Man Test. The pretest, a self-portrait, was first administered by a male or female examiner. Within one week, the posttest, a self-portrait, was administered to the experimental group by the parents after they had given the child fifteen minutes of instruction in sketching. The teaching style and mode was self-selected by the parent. A posttest was given the experimental group by the parent using standard procedures. The male or female examiners administered the posttest to the control group.

The sample was selected from a university child study center in a small Appalachian city. The sample included 42 children, ages 4.0 through 6.0, who were randomly assigned to treatment groups. One

experimental group of 7 girls was assigned to male examiner-father instruction; another group of 7 girls was assigned to female examiner-mother instruction. The experimental boys were assigned to one group of 7 with the male examiner-father instruction while the other 7 experimental boys were assigned to female examiner-mother instruction. The control groups were pretested and posttested by random assignment to male and female examiners. The sample was highly heterogeneous in socioeconomic background and was representative of the population found in small, stable communities in the border states.

The research hypotheses given were:

Hypothesis #1. The father is more effective than the mother in producing positive and significant pre-posttest increment with the daughter.

Hypothesis #2. The father is more effective than the mother, in producing positive and significant pre-posttest increment with the son.

Hypothesis #3. The father is more effective in producing positive and significant pre-posttest increment with the daughter than with the son.

Hypothesis #4. The mother is more effective in producing positive and significant pre-posttest increment with the son than with the daughter.

Hypothesis #5. The children instructed by the parent display more positive and significant pre-posttest increment than the control group.

The findings from the analysis of variance revealed only one significant effect. The Parental Status main effect was observed to be significant at the .001 level of confidence. Sheffe' multiple comparisons indicated that only the mean of the fathers (25.79) was demonstrated to be significant in contrast to the control mean (-4.29). This contrast was at the 0.05 level of significance as required.

Again utilizing Sheffe' procedures, a compound contrast was conducted between the combined means of the parents [(25.78 + 11.93) /2 = 18.86] and the overall control group mean (-4.29). The combined mean representing parental influence was found to be greater than the control group and was significant at the designated 0.05 level of confidence.

Implications

The evidence in this study supports Biller, Heilbrun, Reiss, and Clapp's conclusion that paternal influence with children is a potent factor and cannot be dismissed. The genetically determined female response in experimental situations as reported by Bayley may also be challenged. The daughters did respond to fathers but not to mothers or female examiners.

Male and female examiners in this study simply did not generate the positive potency of influence which the parents did. In fact, the regression of the controls may be in part attributable to this factor

although the examiners were warm and evidently quite popular with the children. A caution might be voiced in presuming that male and female parent surrogates (teachers) can produce immediate change.

The developmental trends analyzed by a graphical analysis of the means indicated a strong cross-sex identification trend. The girls, particularly at age 5, tended to respond less to mother. The father's influence seemed to remain more constant with both sexes. Within the framework of this study, the evidence indicated a constant and significant influence from the father from ages 4 through 6 but the mothers' influence appeared more erratic.

The behaviors of the fathers in this study differed very little from the most affluent father to the father on unskilled wages. From an analysis of the tapes, it was determined that the type of instruction by the father varied according to education; the better educated fathers, five or more years of college, were non-directive while the fathers with high school education or less were directive and illustrated the drawings. Mothers of higher educational levels, five or more years of college, were generally more confident and were especially effective with male children but tended to be ineffective with the female child. (See Appendix.)

The findings in this study are supplementary to Gordon (1969) and are essentially substantive. Gordon found that maternal influence for boys under age two is restrictive; the present study reported a similar effect for girls at age 5. The restrictiveness of the female influence at this age for bright girls was reported by Kohlberg and Zeigler (1967); the girls whose scores dropped in the present study were

those with the highest PPVT-IQ and the highest pretest scores.

The Goodenough Harris Draw-A-Man Test may certainly be an instrument which does not readily yield itself to repeated measures. There is a strong possibility, however, that it is a useful measurement of spatial ability, organization, and perception for the male child. Prior studies have not indicated the value of spatial analysis to be derived from this instrument.

Further research in the area of direct parental influence is needed. Younger children's responses to parents in the home setting need study. Experimentation of the triad; father, mother, and child, in a problem-solving situation should be analyzed in cross-sectional studies.

A study such as the present one needs replication in a larger and more diverse sample in other sections of the country. Testing in other geographic areas would require experimenters of the same ethnic background.

Throughout the present study, the experimenters were constantly aware of the differences in kinesic behavior exhibited by the parents with the child. After examining the tapes, it was noted that parents who were hovering, who sat as close as 12 inches to the child and who touched the child produced negative results. Mothers whose sons showed the greatest increment in scores sat at least 30 inches away from the child. Parents who maintained eye contact and constant attention were found to be effective.

If further analysis of such behaviors were to be pursued in a manner consistent with this experiment, certain technical accommodations

should be made. Technical excellence and good lighting would be essential to such a study if videotaping through one-way mirrors is employed.

The influence of the male teacher with the 4-5 age group has been vigorously debated. The male influence has been considered imperative for disadvantaged children from father-absent homes. The findings from this research indicated that the four- and five-year-old girl is also highly responsive to male influence.

A recommendation would be that this age child be taught by both male and female teachers and that the influence of the male teacher be selectively extended to the young girls. In parent education programs, father involvement should be encouraged as well as the participation of males from representative ethnic and racial backgrounds. Gordon has stated that the parent is an educator whether or not he chooses to be one. These findings have implications for parents. The potency of like-sex and cross-sex identification could be meaningful in shaping, interaction and transaction patterns.

Theoretical Considerations

The findings from the present study indicated several important contributions to theory. The implications for theory were:

1. The results from the present study indicated an important developmental shift in affiliation which is consistent with Freudian theory.

The girls in the study were found to be highly responsive to the father; with the father there were no drops in scores for the girls. There were only a few points increased on scores for most of the

experimental girls interacting with their mothers, except with the six-year-old (6.0) girls. When the mother instructed the son all except one had a greater score increase. This one mother was particularly solicitous of this child and maintained constant physical contact.

All the girls responded to the father figure with the highest intensity underscoring Electra responses. All the boys except one responded to the father; thus the presumption of like-sex identification was in operation.

All boys except one responded with intensity to maternal intervention illustrating the Oedipal response. The girls' negative response to mother underscores the Electra trend for this age group.

2. The significant increase in scores effected by parents on a test commonly used to measure intelligence is supportive evidence of Piagetian transactional theory.

The research hypotheses indicated that parental intervention would effect disequilibration among the experimental subjects. The results of the study confirm this hypothesis. The children were administered a test which has been used as a measure of cognitive ability. The parents' intervention (instruction) interfered with the pattern of the child's response. Disequilibration resulted from the input of new information; a modified configuration resulted. This modified configuration was an accommodation to the environmental input.

The child was in a situation where his behavior sequence was in continuous modification while he was instructed by the parent. Verbal and graphic illustrations by the parent modified the child's behavior. Mothers and fathers modified their behavior frequently to

adjust to the child's approach. Thus there was a mutual adjustment and shaping of behavior. These mutual shapings reflect transactional behaviors.

3. The years just before six were found to be a highly sensitive period; the responses of the children were varied and intense.

When the parents intervened, highly significant responses were found. The father's instruction effected changes from a -4 to 52 point increment with the male child. With the girls, the father's instruction effected changes in a range of 11-64 points.

The mother's instruction with the son effected a score point change from -9 to 43 while with the daughter the score range was -19 points to a 21-point increase.

The children were highly sensitive as shown by the marked change in scores on a standardized instrument which has a fifty-year history of measurement of cognition. The responses of the children were varied and intense as indicated by the data.

4. Non-verbal cognitive tasks, such as employed in this study, reflected a dimension of learning which may be amenable to intervention.

The selected cognitive task, a pencil sketched portrait, was graphic and required the ability to abstract into a linear configuration and graphics representative of body parts. The results of this study indicated significant change could be effected by intervention. The drawings were modified in form, alignment, proportion, and detail.

5. The marked changes in behavior of both girls and boys illustrate the need for more supportive behaviors on the part of fathers and

also illustrate that specific instruction at different age levels varies in its intensity according to the sex of the parental instructor.

The father's instruction emerged as a potent factor from the analysis of the data in this study. Assuming these findings reflect an age-specific response, and are corroborated by further study, the paternal role and influence juxtaposed with maternal influence provides a need for total family involvement in the development of the young child. The father's marked influence as illustrated by the findings support the renewed interest in paternal influence.

In this chapter, the summary of the findings was presented. Implications for further study and research were developed. Suggestions were made concerning the implications of the study as they affect educational practice and psychological research. The findings were analyzed as contributions to specific theoretic positions including psychoanalytic, transactional, and parental influence as aspects of a developmental continuum. Paternal influence with the young child emerged as a potent variable which needs elaboration.